CERES Systems Engineering Committee

Members: Maria Mitchum, NASA, DMO
Sandy Nolan, SAIC
Jill Travers, DAAC

Charter: Serve as a forum for resolving issues which affect more than one working group. Report to CERES Data Management Team

March 31, 1998 1:00 pm

Maria presented the latest Processing Request Form for review. She reported that the next Production Strategy will be Edition1. Maria will send all Processing Requests to Jill Travers, Chris Harris, and Bob Seals.

Jill reported that there are no ValidationR1 ERBE-like products for December or February. Subsystem 2 and Subsystem 3 ValidationR1 products for January have been produced. There are ES8 HDF files available, but no HDF products for ES4 or ES9.

Maria will ask Dave Young if Subsystems 2 and 3 should be run for March with actual snow data. If this is needed, then the DAAC will have to finish processing the March data before they can start processing April data with the new ERBE-like code. Subsystem 5 is scheduled for redelivery on Friday, April 3rd.

Future CERESlib deliveries at the DAAC will need to include a list of subsystems that have to be recompiled and tested. There was a discussion how this information should be provided. In most cases, the person who submits the CERESlib module update should know which subsystems use the module. If this data is not available, Joe Stassi would need to get input from all Subsystems on whether or not the changes affect their software.

Denise Cooper agreed to test the new semi-automated configuration code system. Data for the software and data SCCR environment variables for each subsystem will also be retrieved from a DAAC CM database. The environment variables will be named SWn_n and DATAn_n, where 'n_n' is the Subsystem number. Examples for Subsystems 4.5 are SS4_5 and DATA4_5

Jill requested that the Toolkit version not be a DAAC provided input, but be hard-coded in the PCF generator of each Subsystem. It was also requested that any compilation options needed by a Subsystem be placed in a compilation environment variable script which is separate from the Subsystem environment variable script that will be used by production.

Jill reported that the Snow and Ice data was not changing for Subsystem 4.1, and there was no need to reproduce that data except that the Production Strategy and CC code for the entire Subsystem would change and the PCF names would reflect the new Production Strategy and CC code. It was suggested that the old files be linked to the new file names.

Jill asked when the DAAC should stop production of MOA using GOES1 data and begin production of MOA with GOES2 and with new code that will be delivered on April 3rd. Maria will send Jill processing instructions. Jill also asked when the DAAC needs to tell DAO to stop sending Goes1 data.

Maria reported that ISSCP data needs to be renamed before it is archived. She has requested that the DAAC rename the files, but this has not been done yet.

A proposal for archiving files from Subsystems 1, 2, and 3 was received from Bob Seals. Maria will evaluate the proposal and respond back to Bob.

Maria reported that at a meeting on the disposition of CERES files at the DAAC, she had suggested a mechanism where developers could order a file under the archive system. She asked the Committee to review her suggestion. Jill reported, that on samantha, data is archived under the following file structure: /archive/distribute/uncompressed/CERES/"data_set". An example of where IESs might be archived is:

/archive/distribute/uncompressed/CERES/CER_IES_TRMM-PFM_ValidationR1

External data is archived under: /archive/ingest/uncompressed/ "type"/"year"/ "month"
An example of where DAO data for January 1998 would be archived is:

/archive/ingest/uncompressed/dao/1998/01

It was noted that the data is not stored by data date, but by the date that the data arrived at the DAAC. The month before and the month after the data month may need to be searched to find all of the data for a given month.

Meeting adjourned 2:15 pm. skn.

April 7, 1998 1:00 pm

The latest 'CERES DMT to DAAC Processing Request' form was reviewed and approved. This form will be posted on the CERES Web page. A link will be established from the LaTIS Web page to the CERES Web page.

A meeting was held at the DAAC with Kathleen Morris, the DAAC representative responsible for all Ancillary External (Ingested) Data, Paula Detweiler, DAAC, Denise Cooper, SAIC, and Maria to discuss the **renaming of ingested files**. This feature is needed for several reasons: some data sets have duplication of filenames from month to month, some filenames show what day they were sent to the DAAC!!, other data sets contain orbit numbers in the filename - very difficult to define staging rules, etc., none of which reflect the datadate of the data. For the Geostationary B1 files, the EOS-AM1 files, and the VIRS files a renaming schema has been defined. None of these schemas can be implemented until the DAAC enhances the Archive Database to store the 'renamed' name of the files ingested. So the ball is in the DAAC court for now.

Maria asked Kathleen Morris to cancel the DAO - GEOS1.3 order, it has been replaced by GEOS2 and will be the new data set to be used for the generation of the MOA product.

Dave Young was asked if Subsystems 2 and 3 should be executed for the month of March with actual snow data. The answer was no. It was more desirable to replace the ERBElike software

with the latest modifications and start the April processing (and Jan. reprocessing).

Denise Cooper joined the committee and agreed to redesign her environment files and PCF generator for testing the new semi-automated configuration code system. The Configuration Code, software and data SCCR environment variables, for each subsystem, will be retrieved from a DAAC CM database and will be furnished by the DAAC scripts. The environment variables will be named CCn_n, SWn_n, and DATAn_n, where 'n_n' is the Subsystem number. Examples for Subsystems 4.5 are CC4_5, SS4_5 and DATA4_5. The Production Strategy (PSn_n) and Sampling Strategy (SSn_n) will also be supplied by the DAAC, through the CERES Processing Request form and should be included in the environment file (or script). An internal CERES paper will be distributed soon to describe the methodology and nomenclature to be used for this implementation. It is important to stress that a separate environment file for the PCF(Subsystem)-env.csh will be necessary for this feature to work. If other environment variables are needed for a PGE then another environment file must be written.

Maria asked for comments on the slide to be given to Jim for the 4/98 Science Team meeting, corrections were made and is enclosed for the record.

Items Resolved:

- Established Version Number tracking for all Internal and all External changes effecting a product. The Internal tracker nearly ready to be implemented. External tracker - TBD.
- Streamlined the Science Software Integration & Test (SSI&T) procedures. Divided SCF and DAAC functions to avoid duplication of work and to provide more extensive operational testing.
- Established viewing area for desired Validation Products which are pushed at the end of a successful PGE. Results: Disk Space Saving
- Established 'CERES DMT to DAAC Processing Request' form. Objective: formal documentation and establish a paper trail (cut down on informal requests made on the phone to whoever answers the phone).

Current Issues:

- DRAFT 'CERES TRMM Processing System Requirements at LaTIS' completed and system under development at DAAC. CERES data processing continues manually at this time.(on-going)
- Collecting Processing Details for 43 Processors (on-going)
- Determine Staging Requirements and Renaming Convention for External Ancillary Data Sets (on-going)
- Definition of all 'CERES Output Product Disposition' (at the end of a successful PGE) being developed to include {1. Archive, push to QA disk area, removal, 2. Deletion, 3. Hold for next PGE(CERxxx.xPx)}
- EOS AM1 Level Zero/Ephemeris/Attitude details challenging - different from TRMM

Meeting adjourned 2:30 pm. mvm.